REMARKS FOR ADMINISTRATOR BOLDEN SOUTHERN UNIVERSITY COMMENCEMENT May 13, 2011

Thank you for letting me share your special day. It's my honor to be speaking at the cornerstone of the only Historically Black College/University system in the United States.

Congratulations to all the graduates of the Class of 2011 who begin another phase of your lives today. To parents and guardians here today – I offer my sincere thanks for all you have done to bring these graduates to this milestone. And for other family and friends – you too should feel proud for the roles you have played in supporting your graduate and helping them through the good and bad times as they worked toward this very significant day in their lives.

As the crest of the Mississippi River approaches this area, our thoughts and prayers are with all the residents of this region. My NASA colleagues in Alabama, and thousands of others, are still suffering the consequences of the terrible storms there, and we can only respect the awesome power of our planet to change our lives in a moment. We can study it and learn

about it – even predict certain outcomes, but in the end, we are all human beings in the face of a power greater than ourselves. I wish all of you, and everyone in this entire region, the very best in the days ahead.

At NASA, we think of ourselves as one big extended family, and I'd imagine you might feel the same way here at Southern U. The connections you've made during your studies run deep, and many of the people you've met and experiences you've had here have now become permanent parts of your lives.

My parents were career educators so I was truly blessed in that regard, because passions for learning and high expectations for pursuing my education were integral to my growing up. That may be why, although my current title is NASA Administrator, I also always consider myself an educator as well as a lifelong learner.

As you exit from your studies here at Southern, I hope you're optimistic about the future, because I am.

It's been my observation that students who are just starting their college careers or wrapping them up right now are excited about the future. Am I right? You should be fired up about what lies ahead – for the chance to create capabilities that we don't have today – whether that means new technologies or new ways of communicating and dealing with our world's many challenges. You should want to be a part of something larger and you should want to contribute to national goals. That passion has been evident in students everywhere I've traveled throughout the world -- from Purdue to MIT and Huston Tillotson; from Howard University to the University of Cairo in Egypt and Moscow University in Russia... The same passion is also evident in the elementary schools, middle schools, and high schools of every description that I've visited.

I hear that Southern is in the top ten as far as undergraduate degrees for African Americans in engineering, and a top producer of graduates in technology, business, computer science, nursing, and mathematics. That is a notable record of achievement. We truly need you and your perspective, so keep going! I hope many of you will consider following in the footsteps of the many Southern University alumni who have become members of the NASA team around the country – many of whom are here

today to celebrate your achievement in earning your degrees from the same university that prepared and equipped them to make a tremendous difference in our world today.

We all know that African-Americans and other minorities are under-represented in science and engineering. I need you all to be recruiters and get out there and talk about your passions and why you do what you do. Tell your brothers and sisters and their friends. Tell your neighbors back home as well as your friends. If you like something NASA or some other cool science, technology, or engineering organization does, re-Tweet us, and share links to our stories - stories that I truly hope someday will become your stories. Learn more about all the things going on in your chosen field. Share your excitement -- it will become infectious.

I don't think I am alone among today's leaders when I say that at NASA, our primary criteria are excellence and diversity.

I get asked all the time how NASA is going to deal with the large number of retirements that are expected in the coming years after the end of the

Space Shuttle Program. In fact, we're fortunate to still have a few folks from the Apollo days sharing that heritage with us!

But I'm also strongly focused on the future. It's going to be a future about innovation. At NASA that means research and development. Creating new capabilities that help us explore and also benefit people back here on Earth. President Obama is cultivating that spirit of innovation and creativity throughout the nation – a willingness to harness our imagination for practical benefits and also to raise us as a people – as global citizens who do big things together.

Filling the gap as our older workers leave and take their institutional knowledge with them and making the future about a more diverse workforce are big challenges for people like me. But they also present big opportunities for those of you just entering today's workforce.

At NASA, we are undaunted because of that excitement I see out there in the schools and universities and because of the big, exciting projects and programs we have coming up. Did you know we're sending a rover the size of a small car to Mars this fall; or launching a new satellite, Juno, to Jupiter in August; and pulling into orbit for a year around an asteroid with the Dawn spacecraft in July? And that's just the very near-term stuff!

I'm hoping that those of you graduating here today and many like you at other university campuses all over the country will want to be part of our missions. I tell our NASA workforce I want all sorts of diversity across the Agency. Diversity is the richness that ensues from making efforts to include people on teams and in organizations from a wide variety of backgrounds. And by backgrounds, I mean ensuring that we have people from varying races, ethnic origins, genders, educational backgrounds, and even regions of the country. It is that diversity from which true innovation and creativity are generated. I want us to be inclusive – affording everyone a voice in the decision-making process – and to promote diversity and inclusion and equal opportunity of all forms. The bottom line is that I want the best people we can get at NASA.

What matters to me is that our workforce is cohesive and strong. We have to go out and find people who look different, think differently, have different philosophic and political views. I was lucky enough to be part of international missions on the space shuttle. From orbit, the borders

between the nations of our world below don't exist, unless Mother Nature created them. We all -- as a crew, as a team -- worked together toward common goals. That is what we do at NASA. I don't care about your race, gender, sexual persuasion, or political affiliation. Those are not critical factors – they don't make a difference in your performance, and that's what counts. If you can help me put boots on Mars, that's what I'm looking for.

Your future employers may not be planning a mission to Mars, but I think that philosophy I described is becoming more widespread in the American workforce. Whatever field of employment you choose to pursue, there is a lot of opportunity and a lot of ways for you to contribute to the life and welfare of this country and also make the world a better place. I have three wonderful granddaughters, much younger than you, and I'm counting on you to help shape that better world for them after I've done all that I can.

Although we often focus on technology when we talk about exploration, at the end of the day, it's people from around the world sitting across the table from one another who must decide if together we can bring a complex mission from design to successful flight. I saw this firsthand when I flew the first Space Shuttle mission with a Russian Cosmonaut on board. I'd been

raised to think all Russians – Soviets then – were my enemy; trained that way in the military. But the relationships our crew developed as we trained and carried out that mission and others served as the precursor to our extremely successful cooperation on the Russian Space Station Mir and ultimately on the International Space Station (ISS) today. And my family and I are still friends with that cosmonaut and his family two decades later. In fact, Sergei Krikalev, the most experienced human in living and working in space – having spent more than two years in space during his four missions to Mir and the ISS – is now the Director of the Gagarin Cosmonaut Training Center in Star City, Russia as I serve as the NASA Administrator here in the U.S.

That new world is yours today. Many of the projects and programs over which I preside at NASA today would have been science fiction when I was growing up. The International Space Station -- an orbiting outpost circling overhead 250 miles above Earth, the size of a football field, with human occupants 24/7 for more than ten years now would have been unthinkable in my college days. In fact, the international partnership among 15 nations that built and operates the ISS would itself have been unthinkable even very recently.

That we have a regular presence at Saturn and Mars and now, as of this past March, for the first time have a satellite orbiting the closest planet to our sun, Mercury, were only dreams as I grew up in Columbia, South Carolina. That I would be the first African-American administrator of NASA, serving under the nation's first African-American President, would also have been on that list of things that seemed almost too fanciful to contemplate. But they happened – and the opportunities for all of you are unlimited if you're willing to apply the knowledge gained here at Southern and accept the challenges that will be presented to you.

Obviously, it is a vastly different world than when Southern University was founded in 1880, when the first hydroelectric power plant came online; a time when people were just starting to take pictures of distant nebulas and galactic phenomena. Now we're going to use solar power to fuel that satellite around Jupiter that launches later this summer, and Hubble and other telescopes can see into other solar systems and collect data about light that has traveled from very near the beginning of our universe.

The leaders and innovators of that day passed to us a lifeline that we continue to pass on today. In the day-to-day world in which we live, there have been many hard-won gains for African-Americans and others who were disenfranchised in the past. Your generation can build on the gains that earlier generations have made.

Fifty years ago this month, the first American ventured into space. At the same time, the first freedom riders began their crusade to venture just across the borders of states where segregation persisted in transportation, despite laws against it. And they, too, by challenging the status quo, and standing up to violence, helped us forge a new frontier.

My daughter is a plastic surgeon and my son a lieutenant colonel in the U.S. Marine Corps. My wife and I have always given them this advice -- dream big dreams, do what you want to do, don't listen to anyone who tells you can't do something or you don't belong. As most of this graduating class is minority and women, it is particularly important when you report to your first post-graduation job that you not waste your time trying to explain to someone or justify why you are there. Do your job and do it very well. If

your detractors and critics have any sense at all, they'll eventually understand why you became their boss.

Stay focused on why you entered your field. 'Why' is perhaps the most important question you need to ask yourself. If you don't know why you are doing something, it's hard to remain motivated and you open yourself up to failure.

But once you settle into your career field, you never know where your efforts will take you. I never expected to command that mission with a Russian cosmonaut. In fact, I never expected to become a pilot and never dreamed I'd go to space, but I did. You don't need to have it all planned out right this second. With your graduation today, you will take a major leap forward. Let the future unfold in time. Today may seem urgent, but tomorrow will come. Some of you could walk in space near an asteroid; others of you can be the scientists or engineers who make that possible; or could be telling me why your proposed satellite to travel farther into our solar system is the best choice for our next big science mission.

All of you have the opportunity to pursue a path of your choosing that uses your unique gifts and talents. That's all I've ever done. That's all my parents asked of me.

I'll leave you with a story about a young boy named Nkosi Johnson – born in a South African village named Kwa Zulu Natal...

"Do all you can -

With what you have -

In the time that you have -

In the place that you are!"

Again, congratulations on your achievement. Grab the tether that has been passed from the explorers and achievers of past years – be they spacewalkers or heroic freedom riders headed toward historic change. Live Nkosi's philosophy – explore and dare to make a difference today!

May God bless all of you and may he bless the United States of America!